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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,625	08/07/2001	Chad A. Mirkin	00-713-B1	2286

7590

10/08/2002

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EXAMINER
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RILEY, JEZIA

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 10/08/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/923,625

Applicant(s)

MIRKIN ET AL.

Examiner

Jezia Riley

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-105 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 35-37, drawn to a method of detecting a nucleic acid using one type of nanoparticles, classified in class 435, subclass 6.
- II. Claims 2—24, 29-32, 42, 43, drawn to a method of detecting a nucleic acid using two type of nanoparticles, classified in class 435, subclass 6.
- III. Claims 25-28, drawn to a method of detecting a nucleic acid using three types of nanoparticles, classified in class 435, subclass 6.
- IV. Claim 33, drawn to a method of detecting a nucleic acid using liposomes and one type of nanoparticles, classified in class 435, subclass 6.
- V. Claim 34, drawn to a method of detecting a nucleic acid using liposomes and two types of nanoparticles, classified in class 435, subclass 6.
- VI. Claims 38, 39 drawn to a method of detecting a nucleic acid using energy donors and two types of nanoparticles, classified in class 435, subclass 6.
- VII. Claims 40, 41, drawn to a method of detecting a nucleic acid using latex microspheres, classified in class 435, subclass 6.
- VIII. Claims 44-47, drawn to a method of detecting a nucleic acid using reporter, classified in class 435, subclass 6.
- IX. Claims 48-75, 84, 85, 102, and 103 drawn to a kit, classified in class 435, subclass 4.

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- X. Claims 76, 77 drawn to a kit using liposome, classified in class 435, subclass 4 .
- XI. Claims 78-81 drawn to a kit using energy donor, classified in class 435, subclass 4.
- XII. Claims 82 and 83 drawn to a kit using latex microspheres, classified in class 435, subclass 6.
- XIII. Claims 86 drawn to a kit using satellite probe and reporter molecule, classified in class 435, subclass 4.
- XIV. Claims 87, 88 drawn to a substrate, classified in class 424, subclass 75.
- XV. Claims 89 drawn to a metallic or semi conductor nanoparticles, classified in class 424, subclass 75.
- XVI. Claims 90 drawn to a satellite probe, classified in class 536, subclass 22.1, 24.3.
- XVII. Claims 91-96 drawn to a method of nanofabrication, classified in class 435, subclass 6.
- XVIII. Claims 97-99 and 104 drawn to a nanomaterial, classified in class 435, subclass 6.
- XIX. Claims 100 and 101 drawn to composition of nanoparticles, classified in class 435, subclass 6.
- XX. Claims 105 drawn to a method of separating a selected nucleic acid, classified in class 435, subclass 6.

The inventions are distinct, each from the other because of the following reasons:

Inventions I -VIII are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention I, for example, does not required more than one type of nanoparticle, or the iposome or reporter groups as claimed.

Inventions I-VIII and IX-XIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the inventions IX-XIII are kits that can be used for any of the inventions I-VIII, or for any type of assays involving oligonucleotide such as PCR.

The inventions XIV-XX are patentably distinct because Invention XIV does not require inventions XV-XX for example. Further invention XVI can be used for other types of assay such as PCR.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jezia Riley whose telephone number is 703-305-6855. The examiner can normally be reached on 9:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 703-308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

October 7, 2002

  
JEZIA RILEY  
PRIMARY EXAMINER